

IN THE CLAIMS

Please cancel claim 1-14 without prejudice or disclaimer.

Please add the following new claims 15-55.

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15. A method, including steps of:
- receiving a set of network objects in response to a first request to an information provider from an information requester; and
  - maintaining said network objects in a cache memory, said cache memory including mass storage;
  - wherein said step of maintaining includes a step of minimizing a measure of latency for displaying a logical group of network objects.
16. A method as in claim 15, wherein said step of maintaining includes a step of controlling a measure of latency for displaying an HTML page.
17. A method as in claim 15, including a step of serving said network objects to said information requester in place of said information provider.
18. A method as in claim 17, including a step of serving said network objects to said information requester in place of said information provider in response to a second request from said information requester.

19. A method as in claim 15, wherein said step of receiving uses a computer network.

20. A method as in claim 15, wherein said step of receiving is responsive to protocol messages using a computer network, said protocol messages including a resource identifier for each said network object.

21. A method as in claim 17, wherein said step of serving is responsive to a resource identifier associated with each said network object.

22. A method as in claim 17, wherein said step of serving is responsive to a uniform resource locator associated with each said network object.

23. A method, including steps of:

receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining includes steps of optimizing a measure of correlation between (a) spatial locality of storage of said network objects within said mass storage, and (b) temporal locality of retrieval of said network objects.

24. A method as in claim 23, wherein said step of maintaining includes a step of controlling a measure of latency for displaying an HTML page.

25. A method as in claim 23, including a step of serving said network objects to said information requester in place of said information provider.

26. A method as in claim 25, including a step of serving said network objects to said information requester in place of said information provider in response to a second request from said information requester.

27. A method as in claim 23, wherein said step of receiving uses a computer network.

28. A method as in claim 23, wherein said step of receiving is responsive to protocol messages using a computer network, said protocol messages including a resource identifier for each said network object.

29. A method as in claim 25, wherein said step of serving is responsive to a resource identifier associated with each said network object.

30. A method as in claim 25, wherein said step of serving is responsive to a uniform resource locator associated with each said network object.

31. A method, including steps of:  
receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining includes steps of determining when and where to record said network objects on said mass storage, in response to a measure of efficiency of said steps of maintaining or serving said network objects.

32. A method as in claim 31, wherein said step of maintaining includes a step of controlling a measure of latency for displaying an HTML page.

33. A method as in claim 31, including a step of serving said network objects to said information requester in place of said information provider.

34. A method as in claim 33, including a step of serving said network objects to said information requester in place of said information provider in response to a second request from said information requester.

35. A method as in claim 31, wherein said step of receiving uses a computer network.

36. A method as in claim 31, wherein said step of receiving is responsive to protocol messages using a computer network, said protocol messages including a resource identifier for each said network object.

37. A method as in claim 33, wherein said step of serving is responsive to a resource identifier associated with each said network object.

38. A method as in claim 33, wherein said step of serving is responsive to a uniform resource locator associated with each said network object.

*Best Effort*  
39. A method, including steps of:

receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining includes steps of recording said network objects in said memory and retrieving said network objects from said memory, so as to perform at least one of

maximizing a measure of a rate at which said network objects can be written to said mass storage,

maximizing a measure of a rate at which said network objects can be erased from said mass storage,

maximizing a measure of a rate at which said network objects can be retrieved from said mass storage, or

minimizing a measure of latency time for retrieving said network objects from said mass storage.

40. A method as in claim 39, wherein said step of maintaining includes a step of controlling a measure of latency for displaying an HTML page.

41. A method as in claim 39, including a step of serving said network objects to said information requester in place of said information provider.

42. A method as in claim 41, including a step of serving said network objects to said information requester in place of said information provider in response to a second request from said information requester.

43. A method as in claim 39, wherein said step of receiving uses a computer network.

44. A method as in claim 39, wherein said step of receiving is responsive to protocol messages using a computer network, said protocol messages including a resource identifier for each said network object.

45. A method as in claim 41, wherein said step of serving is responsive to a resource identifier associated with each said network object.

46. A method as in claim 41, wherein said step of serving is responsive to a uniform resource locator associated with each said network object.

47. A method, including steps of:

receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining is performed independently of a file system using said mass storage.

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A method, including steps of:

receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining includes steps of selecting a group of more than one said network objects to be written to said mass storage collectively, and writing said group of network objects to said mass storage in one or more write episodes.

49.

A method, including steps of:

receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining includes steps of writing a group of network objects to said mass storage in one or more write episodes, such that at

least one parameter of said write episodes is responsive to a measure of efficiency of said steps of maintaining or serving said network objects.

50. A method, including steps of:

receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining includes steps of selecting a group of more than one said network objects to be deleted from said mass storage collectively, and deleting said group of network objects to said mass storage in one or more delete episodes.

51. A method, including steps of:

receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining includes steps of deleting a group of network objects from said mass storage in one or more delete episodes, such that at least one parameter of said delete episodes is responsive to a measure of efficiency of said step of maintaining or serving said network objects.

52. A method, including steps of:



receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said cache memory includes at least a portion thereof that is non-persistent.

53. A method, including steps of:

receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining includes steps of recording said network objects in said memory and retrieving said network objects from said memory, without having to maintain said network objects persistently.

54. A method, including steps of:

receiving a set of network objects in response to a first request to an information provider from an information requester; and

maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining includes a step of writing a group of network objects to said mass storage in one or more write episodes, such that said write episodes are performed so as to atomically commit changes to said mass

storage during each said write episode, and whereby said information remains available after at least one of (a) loss of power, (b) loss of storage, or (c) immediate failure of at least a portion of said memory.

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A method, including steps of:

receiving a set of network objects in response to a first request to an information provider from an information requester; and  
maintaining said network objects in a cache memory, said cache memory including mass storage;

wherein said step of maintaining includes a step of deleting a group of network objects to said mass storage in one or more delete episodes, such that said delete episodes are performed so as to atomically commit changes to said mass storage during each said delete episode, and whereby said information remains available after at least one of (a) loss of power, (b) loss of storage, or (c) immediate failure of at least a portion of said memory.